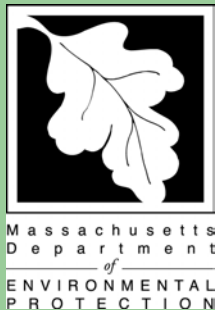


Organics Recycling: Links in the Chain

Solid Waste Advisory
Committee

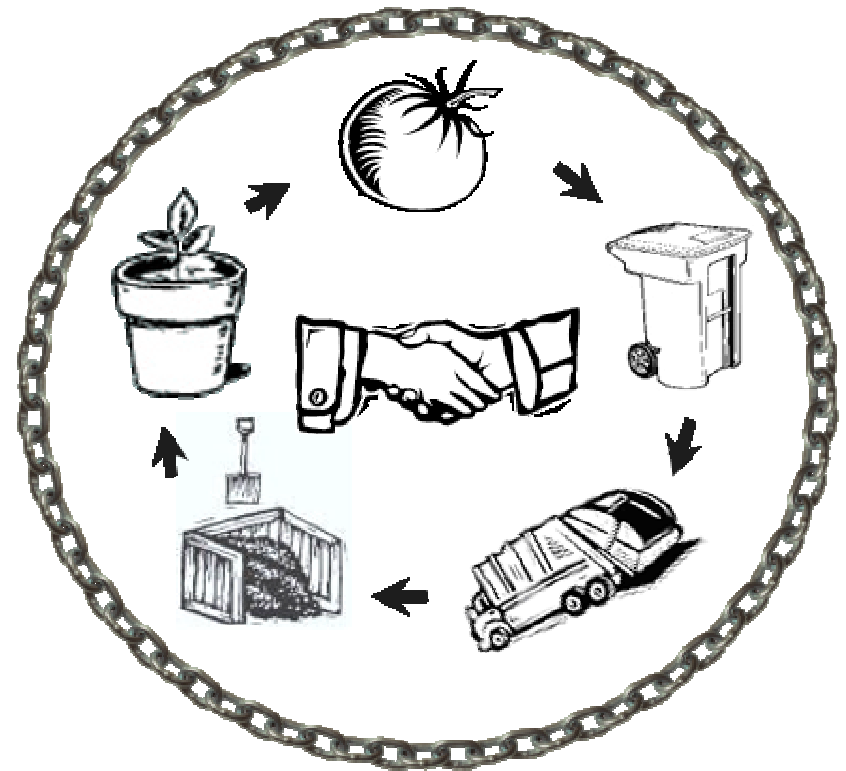
May 27, 2004



Peter Allison, MA DEP

Links in the Chain

- DEP Sprockets
 - SWMP
 - Organics Sub Committee
 - Regulations
 - Assistance
- Business Sprockets
 - Generators
 - Haulers
 - Composters



DEP Role

- Solid Waste Master Plan
- Advisory Committee
- Regulations
- Assistance
 - \$
 - Technical
 - Research
 - Outreach

Solid Waste Master Plan

- 70% waste reduction goal by 2010
- 60% goal for reduction of municipal solid waste, which includes organics.
- Commercial Organics is a priority
 - Organics = 19% of commercial waste stream
 - Target largest generators; food processors, produce, & institutions
 - Expand composting capacity
 - Consider disposal ban on organics

Organics Sub Committee

- Meets bi-monthly
- Advises on Policies and Programs
 - Organics Summit
 - Grant Programs
 - Regulatory Issues
 - Ban has been consistent recommendation

Regulations

310 CMR 16.000

- Conditionally exempt operations
- Determination of Need (DON) up to 100 TPD
- Site Assignment

310 CMR 19.000

- Beneficial Use Determination (BUD)
 - Deregulates some food processing byproducts and other organics allowing it to be composted

Mass Highway specifications

- Range of specs for various compost products

Permit for end use

- Bedminster Nantucket facility established risk-based analysis/testing protocol to determine that material can land applied

Grants & Technical Assistance

- Customized Technical Assistance
 - 12 projects for \$275k
- RIRC (Recycling Industries Reimbursement Credit)
 - 16 projects for \$926k - leveraging \$3M
- Recycling Loan Fund
 - 2 loans for \$385K – leveraging \$300K
- Grants to DEP from US EPA New England
 - \$41K – supermarket and farm based composting projects
- Create state demand for finished comopost
 - work with state Highway Dept and purchasing office (OSD) on procurement specs for compost

Outreach

- 4th MA Organics Summit: Links in the Chain
 - 160 participants – from various sectors and 8 different states
 - 9 sponsors
 - 15 exhibitors
- *New Organics Composting Fact Sheet*

Research

- Density mapping - ID sources
- Commercial characterization
- Biodegradable bag study
- Training aids and manuals

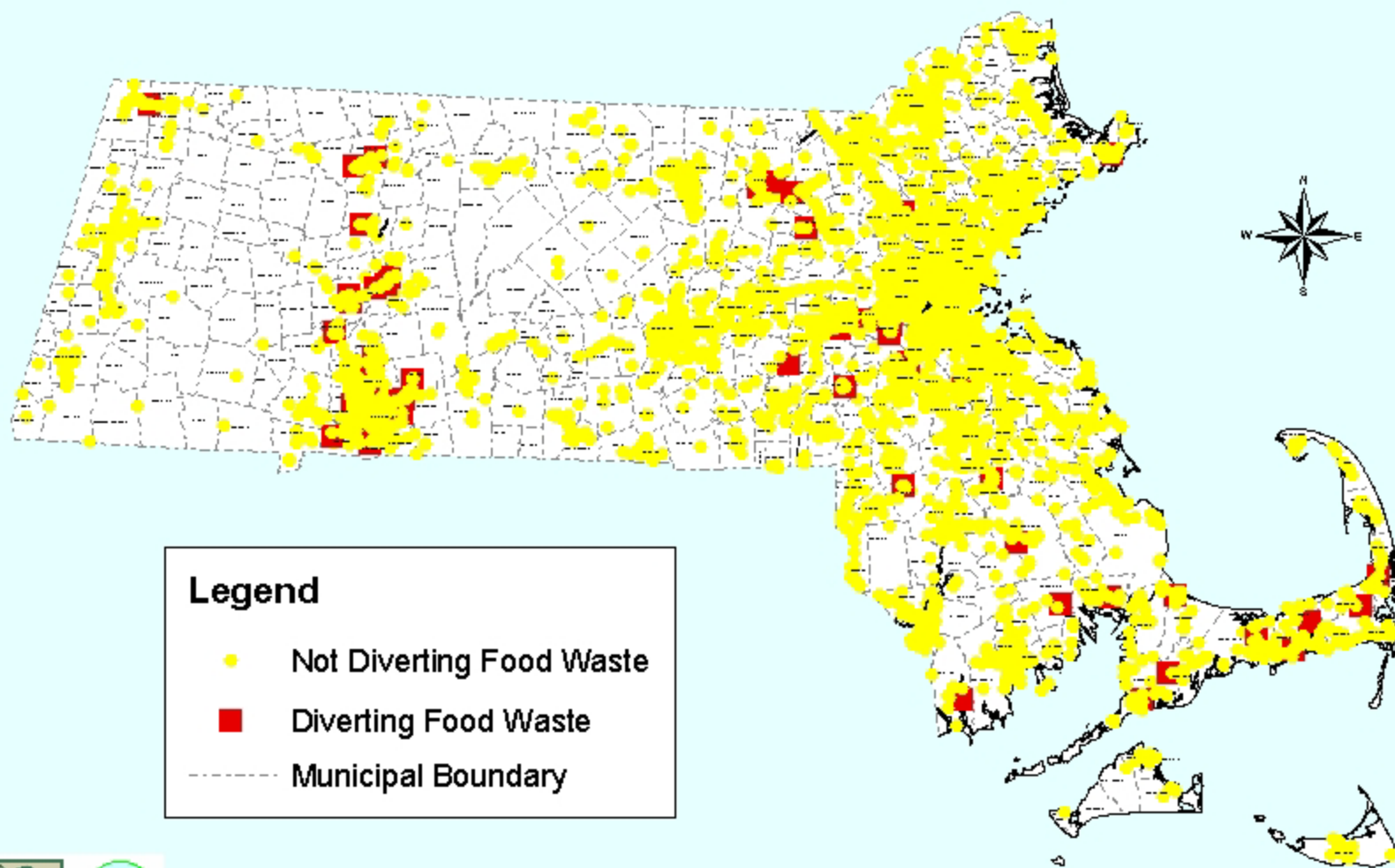
Generators

- Density Mapping provides:
 - Estimates of food waste generation
 - Generator database to enable customized GIS querying & mapping
- Covers nearly 6,000 food waste generators
 - Does not try to count small generators
- Estimated 880,000 tons/year of food waste

Generators

Generator Category	# Businesses	Generation (Tons)	Tons/ Business
Manufacturers/Processors	727	494,000	656
Supermarkets/Grocery Stores	572	98,000	171
Colleges/Universities	101	25,000	242
Restaurants	3,320	168,000	51

Food Waste Generators in Massachusetts



Legend

- Not Diverting Food Waste
- Diverting Food Waste
- Municipal Boundary

Supermarkets

- 55 stores currently diverting food waste @ 20,000 tons per year
 - 35 others interested
 - Stop&Shop, Roche Bros., Big Y, Hannaford Bros., Whole Foods, Shaws are all involved
- \$10K-\$20K per store expected savings
- Hands-on assessment, training and assistance
- EPA/DEP WasteWise Recognition
- Partnership with Mass Food Assoc, WasteCap and CET

Other Generator Programs

- CERC - DNC Convention
 - Target Hotels
- Restaurants/Schools:
 - Northampton/Amherst (35/8)
- Colleges:
 - Amherst / Cape Cod Community College, Tufts, MIT, Harvard
- Municipal:
 - Franklin County / Residential drop-off

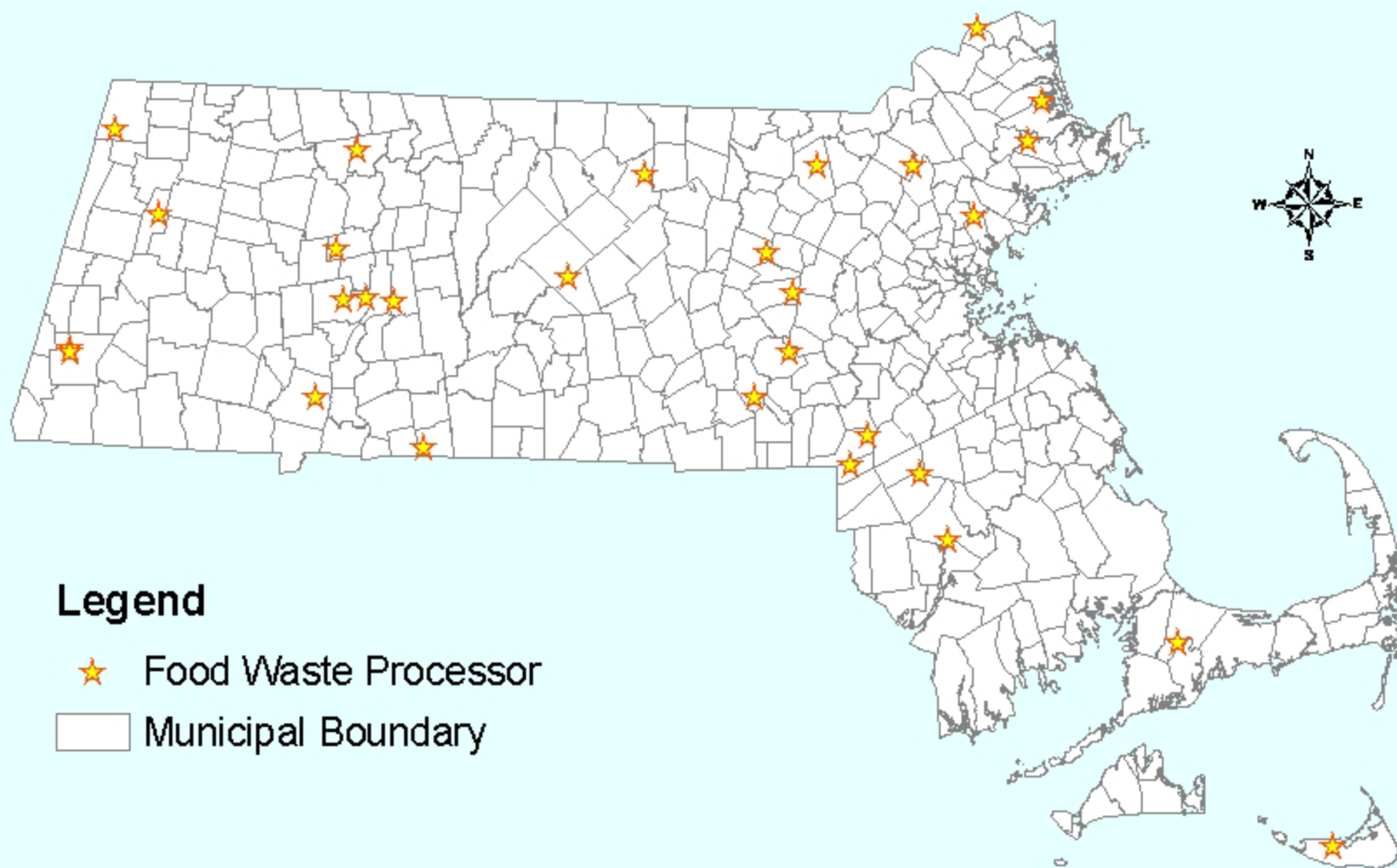
Haulers

- Small independents are main players
- Major haulers have expressed interest
- *New Hauler Brochure* (due out in June 04)

Processors

- 226 operations in MA that create compost
- 28 facilities permitted to take food waste
- Combined capacity of 150,000 tons per day
- Capacity needs vary by region
- Several new technologies/ facilities being investigated
- Updated MOU with DAR will provide more flexibility regarding quantity of off-farm materials received and sold

Food Waste Processors in Massachusetts



Legend

★ Food Waste Processor

□ Municipal Boundary

0 5 10 20 30 40
Miles

Challenges

- Funding
- Raising awareness of opportunity
- Siting facilities / Maintaining efficient operations
- Recruiting haulers
- Selling the benefits
 - Jobs and Economy
 - Waste Diversion, Cost Reductions
 - Smart Growth - creating valuable end-product
 - Public Private Partnerships

Next Steps

- Supermarket Project – needs institutionalization
- DNC - CERC - leverage opportunity for infrastructure development in restaurant and hospitality industry
- MOU with DAR to increase farm based composting
- Discuss compost facility development proposals
- Support opportunities for municipal organics collection programs
- Establish Organics Working Group on Policy: evaluate best organics ban

It's On-Line

<http://www.mass.gov/dep/dswm/dswmpubs.htm>

<http://www.state.ma.us/dep/recycle/compost.htm>

- Regulations
- Summit Presentations
- Density Mapping Report
- Municipal Composting Information
- Free Web-based Resources
 - Food Waste Generators
 - Technical assistance
 - Model Programs and Guidance Documents
 - Organics Professionals
 - State and National Listings
 - Everything you need to know to run a business